

Remarks

The Applicants thank the Examiner for the courtesy shown during the interview on July 12, 2005. It was discussed during the interview that none of the references of record describe or suggest a lubricant coat comprising acrylic resin, calcium stearate and polyethylene wax, let alone such a lubricant coat applied to a stainless steel sheet having the claimed composition. As discussed, this combination is novel and non-obvious over the prior art known to the Applicants. A more detailed discussion of the references cited and the reasons the claims are patentable thereover follows.

The Applicants have amended Claim 7 to correct an inadvertent omission with respect to the lubricant coat paragraph that was originally contained in that claim. Reference to original Claim 7 reveals that the subject matter of the lubricant coat was indeed present. This amendment merely adds back what was already there, but inadvertently omitted in the Preliminary Amendment. Entry into the Official File is respectfully requested.

The Applicants have added new Claims 27 – 30. Those new claims depend from Claims 5 – 8, respectively, and recite that the amount of nickel present is between about 0.2% and about 2.0%. Support may be found in paragraph [0031] of the Applicants' Specification on page 11. Entry into the Official File and consideration on the merits is respectfully requested.

The Applicants acknowledge the rejection of Claims 5 – 8 under 35 U.S.C. §103 over the hypothetical combination of Omosako or Moyle with Takahashi or EP '084. The Applicants note with appreciation the Examiner's helpful comments concerning the theoretical application of EP '084 and Takahashi to the claims, as well as the additional comments concerning Moyle and Omosako. Nonetheless, the Applicants respectfully submit that one of ordinary skill in the art would not make the hypothetical combination in the first place and, in any event, even if the hypothetical combination were to be made, the resulting steel sheet would still fail to teach or suggest the subject

matter recited in Claims 5 – 8. Detailed reasons are set forth below for the Examiner’s convenience.

With respect to EP ‘084, the Applicants note with appreciation the Examiner’s helpful comments with respect to Example E in Table 1 on page 9. The Applicants also note the Examiner’s frank acknowledgment that EP ‘084 does not teach a bake-coated stainless steel sheet with a lubricant comprising acrylic resin, calcium stearate and polyethylene wax. In fact, the Applicants

have carefully studied the entire text of EP ‘084 and there is simply no discussion of a lubricant at all.

Takahashi, on the other hand, does mention a type of lubricant. That lubricant is an epoxy or urethane mixed with wax coated onto the surface of the steel sheets of Takahashi. However, as noted above, this in no way discloses, teaches or suggests a lubricant comprising acrylic resin, calcium stearate and polyethylene wax.

Both of Moyle and Omosako are cited to make up for the lack of disclosure in both of EP ‘084 and Takahashi. This is, however, problematic, inasmuch as both of Moyle and Omosako also fail to disclose, teach or suggest a lubricant comprising acrylic resin, calcium stearate and polyethylene wax. For example, Moyle discloses a coating which is intended to protect against corrosion. Of course, this is sharply different than the Applicants’ bake-coated lubricant coat that is intended to facilitate deep drawing, among other things. In any event, the coating disclosed by Moyle is an epoxy resin, chromium trioxide and water. This has nothing to do with a lubricant comprising an acrylic resin, calcium stearate and polyethylene wax as recited in Claims 5 – 8.

Accordingly, the Applicants respectfully submit that one of ordinary skill in the art would not make the hypothetical combination in the first place and, even if the combination were to be made, the resulting steel sheet would still fail to teach or suggest the subject matter of Claims 5 – 8.

Specifically, Moyle discloses a coating to protect against corrosion. That is not the Applicants' reason for applying for bake-coating the lubricant and is also not a reason set forth in either of Takahashi or EP '084. As noted above, EP '084 does not mention lubricants at all. Also, to the extent that the Applicants were trying to provide a lubricant to facilitate drawing, EP '084 provides utterly no help at all on this point and neither does Moyle. The Moyle lubricant is specifically stated for protection against corrosion, not for facilitation of deep drawing.

Takahashi is substantially silent with respect to the reasons for applying the lubricant. Takahashi merely refers to lubricant films comprising epoxy or urethane mixed with wax coated onto the surface of steel sheets and the surface friction coefficient is varied by varying the thickness and/or the composition of the lubricant film. No motivation is provided to one of ordinary skill in the art to look elsewhere for alternative lubricants. Thus, there is nothing to be gained by looking to Moyle for a coating that is intended to protect against corrosion.

Omosako also goes in a completely different direction from the subject matter of Claims 5 – 8 and from the primary references. Omosako discloses a lubricant which comprises a thickener and iron hydroxide powder. The thickener can be cellulose ether or polyacrylic acids. The lubricant of Omosako is intended to protect against roll scoring which, again, has nothing to do with the subject matter of Claims 5 – 8 and, importantly, has nothing to do with EP '084 and nothing to do with Takahashi. Thus, one of ordinary skill in the art would have no motivation to look to Omosako when attempting to provide a lubricant that facilitates deep drawing. Thus, the Applicants respectfully submit that one of ordinary skill in the art would have no motivation to combine either of the second references with either of the primary references. The Applicants therefore respectfully submit that the combination must fail on that basis alone.

Nonetheless, there are further compelling reasons as to why the rejection must fail. As noted

above, Moyle discloses a coating comprising epoxy resin, chromium trioxide and water. Omosako discloses a lubricant comprising a thickener and iron hydroxide powder. Accordingly, both of the secondary references utterly fail to disclose, teach or suggest acrylic resin, calcium stearate and polyethylene wax as recited in Claims 5 – 8. As a consequence, even if one of ordinary skill in the art were to combine either of the secondary references with either of the primary references, the resulting steel sheet would have a lubricant that comprises either a thickener and iron hydroxide powder or epoxy resin, chromium trioxide and water. Neither of those lubricants comprises acrylic resin, calcium stearate and polyethylene wax. The Applicants accordingly respectfully submit that the secondary references are non-enabling with respect to lubricants as recited in Claims 5 – 8. They are just completely different lubricants and, even if combined with the primary references, result in a steel sheet that has nothing to do with the subject matter of Claims 5 – 8.

Moreover, the Applicants' claims recite that the lubricant is a bake-coated lubricant. There is utterly no disclosure in any of the four references as to bake-coated lubricants. Thus, hypothetically combining either secondary reference with either primary reference would still fail to teach or suggest a bake-coated lubricant. The Applicants accordingly respectfully request withdrawal of the rejection.

In light of the foregoing, the Applicants respectfully submit that the entire Application is now in condition for allowance, which is respectfully requested.

Respectfully submitted,


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